

What is claimed is:

1. A network-based eyeglass lens and frame ordering and marketing system comprising:

a user interface unit;

5 an electronic service center;

at least one of a network and a data transmission system connecting the user interface unit and the electronic service center;

an eyeglass frame selection means for selecting eyeglass frames from among a plurality of eyeglass frames in response to input from a user;

means for creating display information relating to eyeglass frames;

vision testing means for testing vision of the user;

15 an eyeglass lens selection means for selecting eyeglass lenses from among a plurality of eyeglass lenses in response to user input;

an eyeglass ordering and marketing processing means for allowing said eyeglass frame selection means, said vision testing means, and said lens selection means to test vision in response to a requirement of the user sent from the user interface unit, to determine eyeglass frames and eyeglass lenses suitable for the vision tested by said vision testing means, for providing the user with information about ordering, and for concluding
25 an eyeglass purchase contract with the user; and

a display information creating means for creating information relating to eyeglass frames in cooperation with or independently of at least one of said frame selection means and said eyeglass ordering and marketing processing means, and for
5 transmitting the information relating to the eyeglass frames to the user interface unit.

2. The system according to claim 1, wherein the electronic service center comprises an electronic shop information
10 processing means, a display information creating means for creating display information such as electronic catalogs in response to a request from the user interface unit, a lens ordering processing means, a order settling means, and a WWW server.

15 3. The system according to claim 1, wherein said electronic service center comprises a user information registration means, a frame selection information input means, a database control means, a frame information registration means, a frame image registration means, a frame selection means, an image processing
20 means, an output means, and a WWW server, said frame image registration means inputs frame images provided by the electronic service center, said user information registration means registers and controls user's information including a face image sent from the user interface unit, said database control means
25 stores and controls user's face images input by the user

information registration means and frame images input thereto,
said frame selection means is adapted to select an appropriate
one of frame functional structures, frame ornamental structures,
and frame images, stored by the frame information registration
5 means, for each frame of the database control means, corresponding
to frame selection criteria requested by the user and controlled
by the database control means, and is adapted to create or select
a frame image for displaying eyeglass frames of different types,
and said image processing means is adapted to output via an output
10 means an eyeglass-wearing image with an eyeglass frame image,
selected by said frame selection means, being combined with the
face image data controlled by the database control means.

4. A network-based eyeglass lens and frame ordering system
15 comprising:

a user interface unit;
an electronic service center;
at least one of a network and a data transmission system
connecting the user interface unit and the electronic service
20 center;

means for receiving data relating to vision of the user;
a lens selection means for selecting lenses from among
a plurality of lenses based on the data relating to the user's
vision received by the means for receiving data relating to vision
25 of the user;

a lens ordering processing means for allowing said lens selection means to determine lenses satisfying requirements of the user sent from the user interface unit, for providing the user interface unit with information relating to ordering the
5 lenses, and for concluding a lens purchase contract with the user; and

a display information creating means for allowing said lens ordering processing means to create information relating to lenses, and for transmitting the information relating to the
10 lenses to the user interface unit.

5. The system according to claim 4, wherein said electronic service center comprises a user information registration means, a frame selection information input means, a database control
15 means, a frame information registration means, a frame image registration means, a frame selection means, an image processing means, an output means, and a WWW server,
said frame image registration means inputs frame images provided by the electronic service center, said user information
20 registration means registers and controls user's information including a face image sent from the user interface unit, said database control means stores and controls user's face images input by the user information registration means and frame images
25 input thereto, said frame selection means is adapted to select an appropriate one of frame functional structures, frame

ornamental structures, and frame images, stored by the frame information registration means, for each frame of the database control means, corresponding to frame selection criteria requested by the user and controlled by the database control
5 means, and is adapted to create or select a frame image for displaying eyeglass frames of different types, and said image processing means is adapted to output via an output means an eyeglass-wearing image with an eyeglass frame image, selected by said frame selection means, being combined with the face image
10 data controlled by the database control means.

6. A network-based eyeglass lens and frame ordering system comprising:

- a user interface unit;
- 15 an electronic service center;
- at least one of a network and a data transmission system connecting the user interface unit and the electronic service center;
- a vision testing means for testing vision of a user;
- 20 a lens selection means for selecting lenses from among a plurality of lenses based on the data relating to the user's vision received by the means for receiving data relating to vision of the user;
- a lens ordering processing means for allowing said vision
25 testing means and said lens selection means to test vision in

response to a requirement of the user sent from the user interface unit, for determining lenses suitable for the vision of the user, for providing the user interface unit with information about ordering, and for concluding a lens purchase contract with the
5 user; and

a display information creating means for allowing said lens ordering processing means to create information relating to lenses, and for transmitting the information relating to the lenses to the user interface unit.

10

7. The system according to claim 6, wherein the electronic service center comprises an electronic shop information processing means, a display information creating means for creating display information such as electronic catalogs in
15 response to a request from the user interface unit, a lens ordering processing means, a order settling means, and a WWW server.

8. A network-based eyeglass lens and frame ordering system comprising:

20

a user interface unit;

an electronic service center;

at least one of a network and a data transmission system connecting the user interface unit and the electronic service center;

25

a user information registration means for registering and

controlling information of each user including a face image sent from the user interface;

a frame information registration means for storing and controlling user face images input by the user information
5 registration means and frame images input by a frame image registration means;

a frame selection means for selecting frames from among frames stored in the frame information registration means based on frame selection criteria requested by the user and transmitted
10 from the user interface unit in order to create an image of the selected frames;

means for combining the image of the eyeglass frames selected by said frame selection means with the user's face image data to output an eyeglass-wearing image; and

15 means for transmitting to the user interface unit the eyeglass-wearing image having the eyeglass frame image combined with the user's face image data.

9. The system according to claim 8, wherein the electronic
20 service center comprises an electronic shop information processing means, a display information creating means for creating display information such as electronic catalogs in response to a request from the user interface unit, a lens ordering processing means, a order settling means, and a WWW server.

25

10. The system according to claim 8, further comprising:
an eyeglass frame selection means for selecting eyeglass
frames from among a plurality of eyeglass frames in response
to user input;

5 means for creating display information relating to eyeglass
frames;

an eyeglass frame ordering processing means for allowing
said eyeglass frame selection means to determine eyeglass frames
satisfying requirements of the user sent from the user interface
10 unit, for providing the user interface unit with information
relating to ordering the frames, and for concluding an eyeglass
frame purchase contract with the user; and

a display information creating means for allowing said
eyeglass frame selection means to create information relating
15 to eyeglass frames, and for transmitting the information relating
to the eyeglass frames to the user interface unit.

11. The system according to claim 8, wherein said
electronic service center comprises a user information
20 registration means, a vision test information input means, a
database control means, an image processing means, a vision data
creation means, and a WWW (World Wide Web) server, and said user
information registration means collects data about users or people
requesting a vision test to register and control the data in
25 a user information database, the data about users including

addresses, names, dates of birth, telephone numbers, eye
conditions, requirements for eyeglasses, and data for identifying
users such as user identifications, user passwords, and user
codes, said vision test information input means determines and
5 registers a vision level, based on data concerning the vision
test and including reference for carrying out the vision test
with, the data being sent from the user interface unit, said
image processing means registers and controls Landolt rings of
a vision test table as a vision test table database, and transmits
10 to the user interface unit and displays the Landolt rings of
the vision test table registered and controlled in the vision
test table database, and said vision data creation means retrieves
vision test data including levels of nearsightedness,
farsightedness, and astigmatism, based on the reference input
15 from the user interface unit for the vision test, and creates
vision test results including the retrieved and extracted data.

12. A method for ordering eyeglass lenses and frames via
at least one of a network and a data transmission system and
20 using a user interface unit, an electronic service center, and
at least one of a network and a data transmission system connecting
the user interface unit and the electronic service center, said
method comprising:

selecting eyeglass frames from among a plurality of eyeglass
25 frames in response to user input via the user interface unit;

creating display information relating to eyeglass frames;
testing vision of the user;
selecting eyeglass lenses from among a plurality of eyeglass
lenses in response to the user input and the tested vision of
5 the user;

processing an eyeglass order made based on said eyeglass
frame selection step, said vision test step, and said lens
selection step such that vision is tested vision in response
to a requirement of the user sent from the user interface unit,
10 determining eyeglass frames and eyeglass lenses suitable for
the vision, providing the user interface unit with information
about ordering, and concluding an eyeglass purchase contract
with the user; and

creating display information relating to eyeglass frames
15 in cooperation with or independently of one of said frame selection
step and said eyeglass ordering processing step, and for
transmitting the information on the eyeglass frames to the user
interface unit.

20 13. A method for ordering eyeglass lenses and frames via
at least one of a network and a data transmission system and
using a user interface unit, an electronic service center, and
at least one of a network and a data transmission system connecting
the user interface unit and the electronic service center, said
25 method comprising:

receiving data relating to vision of the user;

selecting lenses from among a plurality of lenses based
on the data relating to the vision of the user;

5 a lens ordering processing step for determining lenses
satisfying a requirement of the user sent from the user interface
unit and said data relating to the vision of the user, for providing
the user interface unit with information relating to ordering
the lenses, and for concluding a lens purchase contract with
the user; and

10 a display information creating step for creating
information about the lenses in response to said lens ordering
processing step, and for transmitting the information about
the lenses to the user interface unit.

15 14. A method for ordering eyeglass lenses and frames via
at least one of a network and a data transmission system and
using a user interface unit, an electronic service center, and
at least one of a network and a data transmission system connecting
the user interface unit and the electronic service center, said
20 method comprising:

testing vision of a user;

selecting lenses from among a plurality of lenses based
on the tested vision of the user;

processing an order for a lens based on the tested vision
25 in said vision test step and said lens selection step in response

to requirements of the user sent from the user interface unit,
for determining lenses suitable for the vision, for providing
the user interface unit with information about ordering the lenses,
and for concluding a lens purchase contract with the user; and

5 a display information creating step for creating
information about the lenses in response to said lens ordering
processing step, and for transmitting the information about the
lenses to the user interface unit.

10 15. A method for ordering eyeglass lenses and frames via
at least one of a network and a data transmission system and
using a user interface unit, an electronic service center, and
at least one of a network and a data transmission system connecting
the user interface unit and the electronic service center, said
15 method comprising:

 registering and controlling user's information including
a face image sent from the user interface unit;

 a frame information registration step for storing and
controlling user's face images input by the user information
20 registration step and frame images input in a frame image
registration step;

 a frame selection step for selecting frames from among
frames stored in the frame information registration step in
response to frame selection criteria requested by the user and
25 transmitted by the user interface unit, and for creating an image

of the frames selected

a step for combining the image of the eyeglass frames selected in said frame selection step with the user's face image data, and for outputting an eyeglass-wearing image; and

5 a step for transmitting to the user interface unit the eyeglass-wearing image having the eyeglass frame image combined with the user's face image data.

16. The method according to claim 15, said method further comprising:

selecting eyeglass frames from among a plurality of eyeglass frames in response user input;

creating display information about eyeglass frames;

a step for allowing said eyeglass frame selection step
15 to determine eyeglass frames satisfying a requirement of the user sent from the user interface unit, for providing the user with information about ordering the frames, and for promoting the conclusion of an eyeglass purchase contract with the user; and

20 a display information creating step for creating information about eyeglass frames in response to said frame selection step, and for transmitting the information about the eyeglass frames to the user interface unit.